



NOAA's Weather and Water Mission Goal

Frank Kelly



Outline



- **2003 NOAA Strategic Plan**
- **Weather and Water**
- **Compelling National Issues**
- **Outcomes**
- **Strategies**
- **Summary**



2003 NOAA Strategic Plan

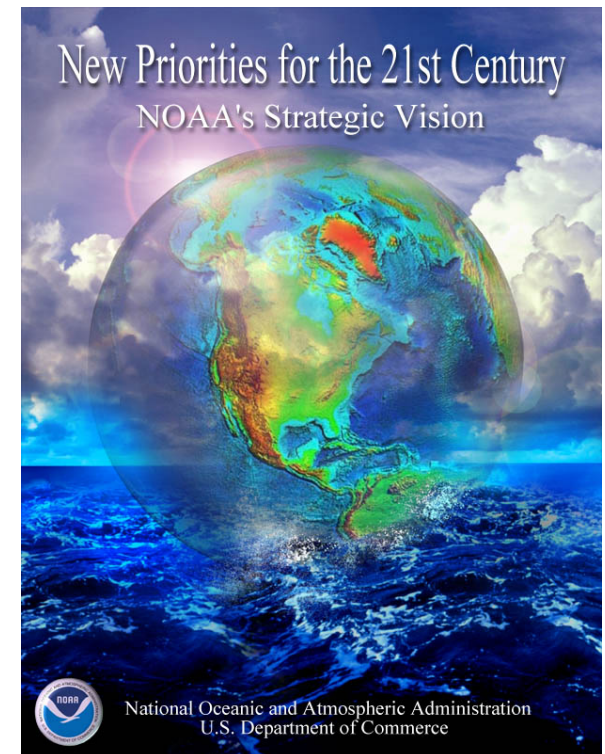


Vision

To move NOAA into the 21st Century scientifically and operationally, in the same interrelated manner as the environment that we observe and forecast, while recognizing the link between the global economy and our planet's environment.

Mission

To understand and predict changes in the Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs.





2003 NOAA Strategic Plan

Four Mission Goals



- Protect, Restore, and Manage the Use of Coastal and Ocean Resources through Ecosystem-based Management
- Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond
- **Serve Society's Needs for Weather and Water Information**
- Support the Nation's Commerce with Information for Safe and Efficient Transportation





Weather and Water

Domain and Definitions



- **Weather**
 - *Space Weather*
 - *Atmosphere*
 - *Terrestrial Weather*
 - *Air Quality*
- **Water**
 - *Snow Pack*
 - *Lakes*
 - *Rivers & Streams*
 - *Soil Moisture*
 - *Coasts & Bays*
 - *Estuaries*
 - *Oceans*

Weather and Water Information





Weather and Water

Compelling National Issues



- **Severe weather (atmosphere & space)** continues to have major National Impacts
 - *Causing over \$11B in damage per year – over 500 Casualties!*
- **Drought and limited fresh water availability** are growing National Concerns
 - *\$6B to \$8B in losses per year!*
- **Poor air quality** has significant effect on Nation's health and economy
 - *Pollution causes up to 60,000 deaths and \$150B in costs per year!*
- **Damage from coastal weather and water conditions** place the Nation's coastal communities at increasing risk
 - *Damages from coastal storms can reach \$50B per year!*



Weather and Water

Where are we going?



Vision

A Safer, Stronger, Healthier America
Through Trusted, Timely, and Accurate Weather and Water Information
and Services

Science, Operations, Service - Success

Impacts

New Understanding of the Changing Environment
Improved Prediction and Assessment of Environmental Risks
Sound Decisions for Conserving and Managing Environmental Resources
Balanced Societal and Environmental Needs



Weather and Water *Outcomes*



- Reduced loss of life and injury and lowered cost of damage to the economy from extreme weather (atmospheric and space), poor air quality, and hazardous water events
- Social and economic benefits from improvements and applications of weather and water information and services
- Better social and policy decisions on air quality and coastal water conditions
- Increased customer satisfaction with NOAA weather and water information and services
- Current and future generations possessing and understanding of the impacts of weather and water on their lives



Weather and Water *Strategies*

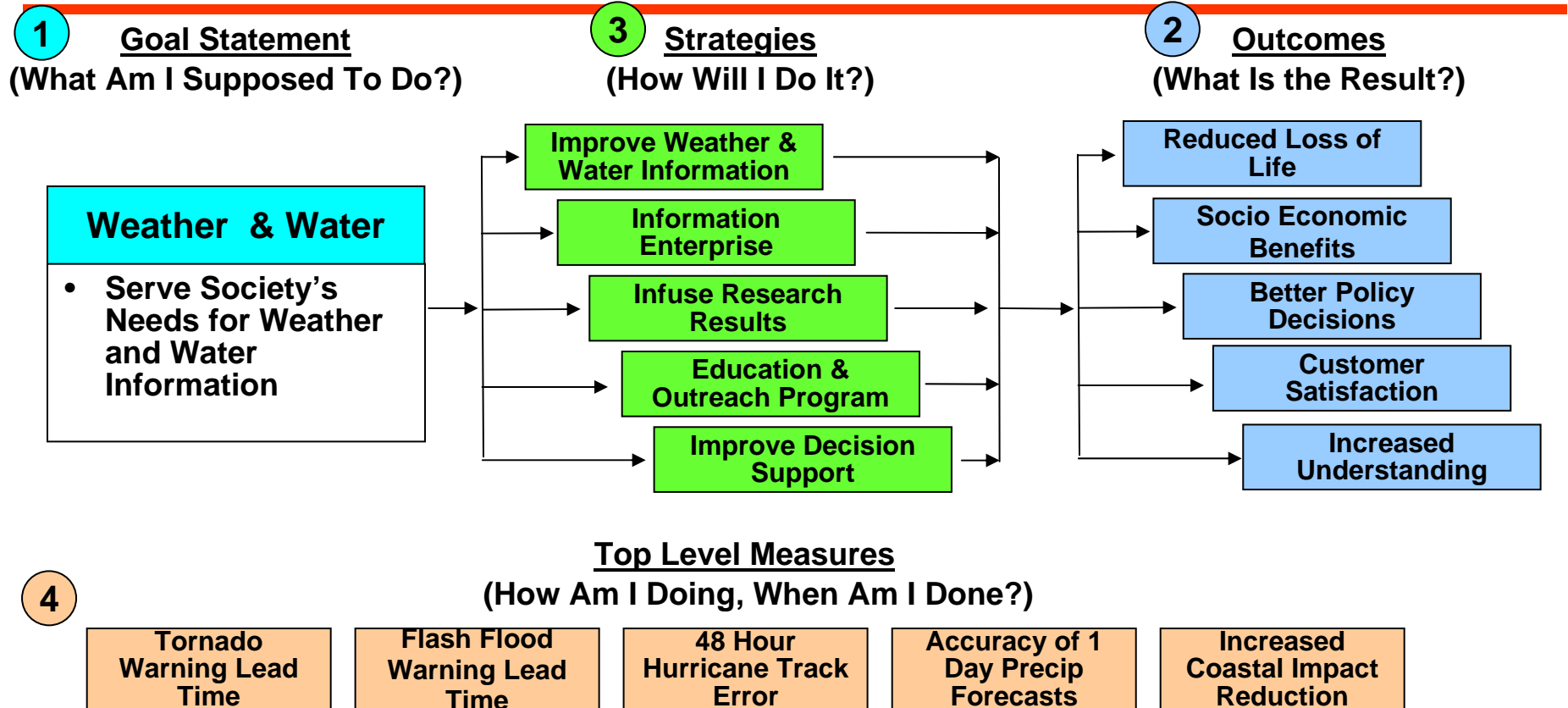


Sustain and improve the performance in delivery of trusted, timely, and accurate weather and water information services to benefit the Nation

- Improve reliability, lead-time and understanding
- Integrating an end-to-end information enterprise
- Conduct and infuse research results and new technologies – efficiently and effectively
- Build a broad based, coordinated education and outreach program
- Transitioning from a product-orientation to an information-orientation
- Employ emerging science and technology to advance decision support services and educate stakeholders
- Creating and leveraging partnerships to foster effective information services.



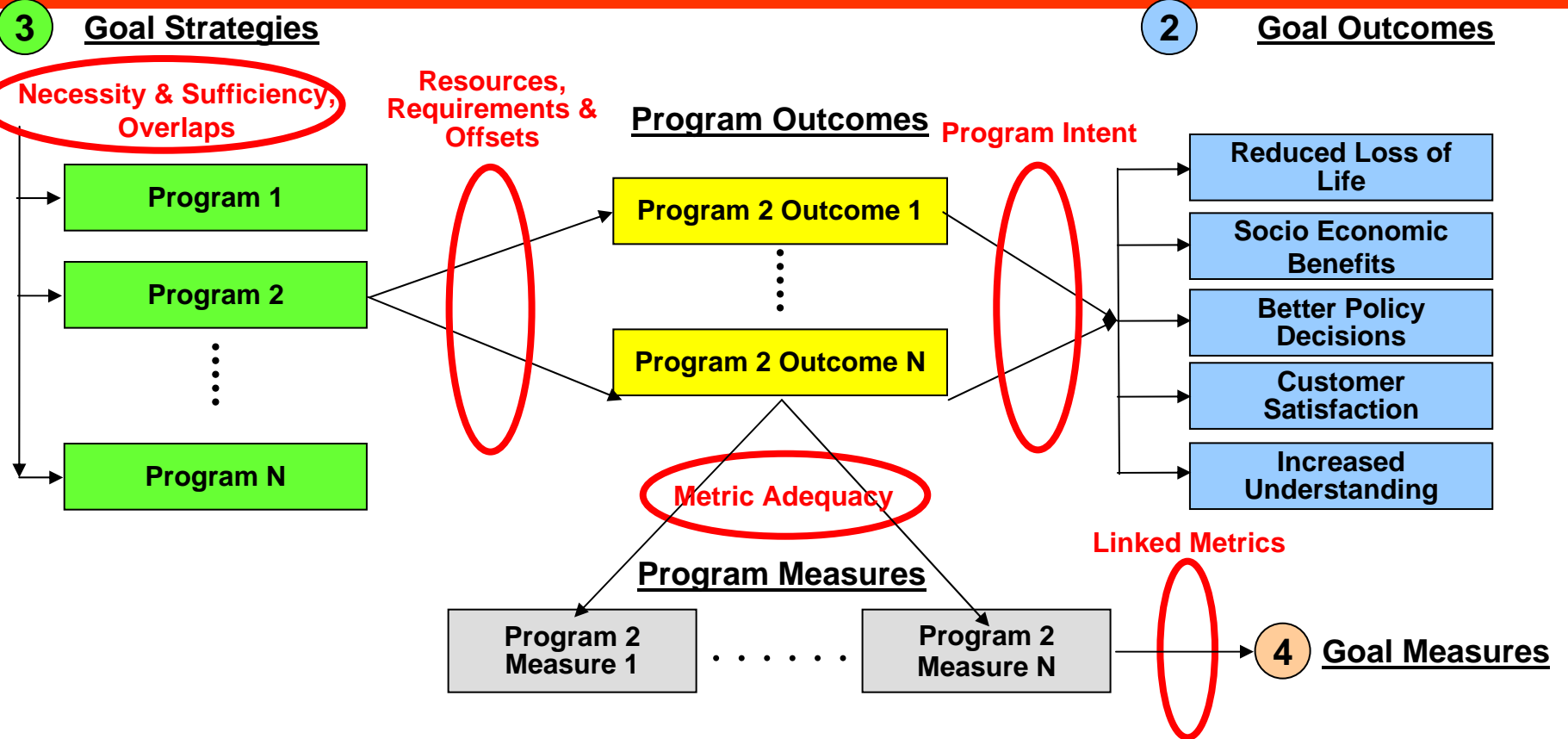
Goal Level Assessment Structure



Task 1: Build Complete and Consistent Assessment Structure



Goal Level Assessment Structure



Task 2: Build Complete and Consistent Assessment Methodology



Goal Assessment Guidance



- Describe current status of goal's ability to deliver outcomes, implement strategies, achieve performance measures in NOAA strategic plan
- Identify and prioritize most important goal-level gaps defined in PBAs to achieve goal outcomes
- Re-affirm seven future directions from PR06 AGM
 - *Do they still articulate major activities for NOAA*
 - *Provide recommendations*



NOAA 100%



NOAA Total

\$6,071.9

\$6,087.8

\$6,465.7

\$6,379.8

\$6,646.1

Goal Totals

Ecosystems

\$2,691.1

\$2,454.1

\$2,522.3

\$2,533.6

\$2,569.6

Climate

\$557.1

\$615.5

\$677.0

\$712.6

\$724.6

Weather

\$1,057.7

\$1,073.2

\$1,081.1

\$1,086.1

\$1,330.3

Commerce and Transportation

\$231.2

\$246.8

\$256.8

\$261.0

\$269.5

Goal wide

\$1,534.8

\$1,698.2

\$1,928.5

\$1,786.5

\$1,752.1



NOAA 100% Weather and Water



Local Forecasts and Warnings	\$670.4	\$666.5	\$665.9	\$666.2	\$656.2
Tropical Storm Program	\$5.5	\$5.5	\$5.5	\$5.5	\$5.5
Space Weather	\$16.6	\$34.1	\$24.8	\$25.4	\$275.7
Hydrology - Rivers, Lakes, and Floods	\$51.2	\$51.8	\$54.8	\$57.7	\$60.2
Air Quality	\$24.4	\$23.6	\$26.0	\$26.4	\$27.3
Environmental Modeling	\$115.2	\$115.3	\$115.6	\$115.8	\$115.9
Weather Water Sci and Tech Infusion Pgm	\$174.4	\$176.4	\$188.5	\$189.1	\$189.5



Anticipated Focus PR07-11



- Water Resources (Drought)
- Service Centers – virtual or otherwise
- Standard use of GIS for all NOAA products (applicable)
- EME – Ecosystem-based management enterprise
- NOAA Concept of Operations
- Integrated observing ‘system of systems’
- Sustain operations
- Sustain improvement
- Sustain science (Research Review and Plan)
- Ocean Commission Report
- International Polar Year 2007-2008



Summary



- Weather and water emphasizes information services supporting the 'knowledge economy'
 - *Saving lives, reducing property damage and enhancing economic opportunity are keystone activities*
 - *Proven performance in meeting goals*
 - *Weather and water information services*
 - In a usable form
 - *At the time needed*
 - » With the accuracy and reliability expected!
- Together we can turn information into **ACTION**
- *Science, Operations, Service - Success*



Backup





NOAA 100% Ecosystems



Ecosystems					
Habitat Restoration	\$249.3	\$249.9	\$250.0	\$250.4	\$250.4
Corals	\$80.8	\$80.9	\$80.9	\$80.8	\$80.9
Protected Areas	\$138.7	\$159.7	\$175.5	\$191.7	\$196.5
Coastal Resource Management	\$195.1	\$218.7	\$238.8	\$266.6	\$288.8
Invasive Species	\$39.8	\$38.6	\$38.6	\$38.6	\$38.6
Undersea Research and Exploration	\$144.3	\$164.2	\$189.6	\$147.1	\$149.8
Protected Species Management	\$67.0	\$68.0	\$68.4	\$68.6	\$69.0
Fisheries Management	\$495.6	\$187.1	\$187.1	\$187.3	\$187.5
Aquaculture	\$4.2	\$5.1	\$6.0	\$9.6	\$9.8
Enforcement	\$58.8	\$64.4	\$69.9	\$75.4	\$80.8
Ecosystem Research	\$1,217.5	\$1,217.5	\$1,217.5	\$1,217.5	\$1,217.5



NOAA 100% Climate



Climate

Climate Observations and Analysis	\$358.8	\$405.0	\$453.3	\$485.5	\$496.5
Climate Forcing	\$71.3	\$76.8	\$79.0	\$81.9	\$84.3
Climate Predictions and Assessments	\$73.8	\$73.8	\$73.8	\$73.8	\$73.8
Climate and Ecosystems	\$28.5	\$33.1	\$36.2	\$36.2	\$34.7
Regional Decision Support	\$24.7	\$26.8	\$34.7	\$35.2	\$35.3



NOAA 100% Goal-wide



Programs to Support All Goals

Homeland Security	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8
NOAA Management	\$71.7	\$71.6	\$71.6	\$71.6	\$71.6
Geostationary Orbiting Environmental Satellites	\$388.2	\$499.9	\$659.0	\$725.9	\$752.1
Polar Satellites	\$416.7	\$442.0	\$437.8	\$363.5	\$413.0
Satellite Services	\$88.6	\$90.8	\$89.4	\$92.0	\$92.0
Facilities	\$123.8	\$100.1	\$87.0	\$69.2	\$62.5
Administrative Services	\$54.6	\$54.6	\$54.6	\$54.6	\$54.6
IT Services	\$16.5	\$16.5	\$15.5	\$15.5	\$15.5
Ship and Aircraft Acquisition and Operation	\$373.9	\$421.9	\$512.8	\$393.4	\$290.0



NOAA 100%

Commerce and Transportation



Commerce and Transportation

Marine Transportation Systems	\$148.5	\$163.7	\$172.6	\$175.1	\$185.6
Aviation Weather	\$16.8	\$16.8	\$16.8	\$16.8	\$16.8
Marine Weather	\$3.3	\$3.8	\$4.1	\$4.1	\$4.1
Geodesy	\$45.2	\$45.2	\$45.2	\$45.2	\$45.2
NOAA Emergency Response	\$13.4	\$13.3	\$14.0	\$15.5	\$13.5
Commercial and Remote Sensing Licensing	\$1.4	\$1.4	\$1.5	\$1.7	\$1.7
C & T Science and Technology Program	\$2.6	\$2.6	\$2.6	\$2.6	\$2.6